

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 21-134360

Project Name/Address: Hormel Shoreline Improvements - 9810 SE Shoreland DR

Planner: David Wong

425-452-4282

DWong@Bellevuewa.gov

Minimum Comment Period: 02/03/2022

Materials included in this Notice:

✓ Blue Bulletin
✓ Checklist
✓ Vicinity Map
✓ Plans
✓ Other:

OTHERS TO RECEIVE THIS DOCUMENT:

☑ State Department of Fish and Wildlife

☑ State Department of Ecology, Shoreline Planner N.W. Region

☑ Army Corps of Engineers

☑ Attorney General

☑ Muckleshoot Indian Tribe



SEPA Environmental Checklist

The City of Bellevue uses this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions

The checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully and to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions.

You may respond with "NotApplicable" or "Does Not Apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies and reports. Please make complete and accurate answers to these questions to the best of your ability in order to avoid delays. For assistance, see SEPA Checklist Guidance on the Washington State Department of Ecology website.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The city may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Background

- 1. Name of proposed project, if applicable Hormel Residence Landscape Improvements
- 2. Name of applicant <u>Scott Hormel</u>
- 3. Contact person Kenny Booth, The Watershed Company Phone 425-822-5245
- 4. Contact person address <u>750 Sixth Street South Kirkland, WA 98033</u>
- 5. Date this checklist was prepared **December 10, 2021**
- 6. Agency requesting the checklist **City of Bellevue**

- 7. Proposed timing or schedule (including phasing, if applicable)

 This checklist describes unpermitted work which occurred on the subject parcel in 2018, as well as proposed actions to restore or mitigate those actions as necessary. Work not yet completed will begin as soon as all permits are obtained.
- 8. Do you have any plans for future additions, expansion or further activity related to or connected with this proposal? If yes, explain.
 - The applicant has applied for separate permits for a remodel of the residence adjacent to the landscape actions which are the subject of this proposal.
- 9. List any environmental information you know about that has been prepared or will be prepared, that is directly related to this proposal.
 - Hormel Wetland Technical Memorandum, The Watershed Company, December 18, 2020
 - Special Shoreline Report, The Watershed Company, December 10, 2021
- 10. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
 A building permit (20-105372-BR) is pending for a remodel of the residence on site.
- 11. List any government approvals or permits that will be needed for your proposal, if known.
 - Shoreline Substantial Development Permit
- 12. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)
 - Unpermitted work occurred within the Lake Washington shoreline setback on a residential property in 2018, resulting in minor modifications to hardscape and landscape areas within the setback. The pre-existing condition included a wood bulkhead at the ordinary high water mark (OHWM), concrete stairs and retaining walls, and areas of planting. Improvements carried out in 2018 included:
 - Relocation of stairs. The pre-existing stairs that provided access from the residence to the shoreline/dock came off the west side of the house. These stairs were removed and new stairs added at the north side of the house.
 - Reconfiguration of walkway. The pre-existing walkway to the shoreline/dock was slightly reconfigured. Reconfiguration included an overall decrease in the length of the walkway since the new stairs were more centrally located to the shoreline area.
 - Bulkhead removal. The pre-existing wood bulkhead was removed from the site.
 - Retaining walls. New retaining walls were added in several locations to help support grade changes. This included a block retaining wall upslope from the dock and a separate series of walls parallel and upland of the concrete pathway. These walls were intended to help support

- grade near the house, as signs of erosion had become evident.
- Vegetation revisions. The pre-existing shoreline setback area was primarily comprised of nonnative shrubs and grasses. These species were removed and replaced with a combination of different non-native species and artificial turf.
- Water feature. An ornamental water feature was added near the shoreline to account for the discharge of surface water runoff in the area.

As part of retroactively permitting these actions the artificial turf is proposed to be removed and replaced with plantings. All other improvements will remain.

13. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and the section, township and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The subject property is located at 9810 SE Shoreland Drive (parcel 7768700230) in the City of Bellevue. The site is located along the southern shoreline of Meydenbauer Bay, Lake Washington, oriented in a north-northeasterly direction.

Environmental Elements

Earth

1.	General description of the site:						
	☐ Flat						
	★ Rolling						
	☐ Hilly						
	☐ Steep Slopes						
	☐ Mountainous						
	☐ Other						
2.	What is the steepest slope on the site (approximate percent slope)? 19%						
3.	What general types of soils are found on the site (for example, clay, sand, gravel, peat,						
	muck)? If you know the classification of agricultural soils, specify them and note any						
	agricultural land of long-term commercial significance and whether the proposal results in						
	removing any of these soils.						

The USDA Natural Resources Conservation Service (NRCS) Web Soil Survey indicates Kitsap silt loam, 15-30% slopes on the subject property.

4. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Signs of upland erosion are reported to have been present on site prior to the improvements.

- 5. Describe the purpose, type, total area and approximate quantities and total affected area of any filling, excavation and grading proposed. Indicate the source of the fill.
 Exact quantities of excavation/fill necessary to complete the unpermitted activities are unknown.
 Additional improvements to be authorized under this proposal are limited to the removal of cobbles placed along the shoreline, the removal of the artificial turf, and the planting of native vegetation.
- 6. Could erosion occur as a result of clearing, construction or use? If so, generally describe. Limited erosion could occur due to exposed soils and soil import activities. However, appropriate temporary erosion control BMPs would be employed as needed.

	The proposed final condition of the landscape improvements does not include any increase in
	construction (for example, asphalt or buildings)?
7.	About what percent of the site will be covered with impervious surfaces after project

impervious surfaces.

Proposed measures to reduce or control erosion, or other impacts to the earth, if any.
 Temporary erosion control BMPs would be employed as needed.
 Erosion Control regulated by BCC 23.76

Air

- 1. What types of emissions to the air would result from the proposal during construction, operation and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.
 - During construction, emissions to the air including equipment exhaust and dust could result from construction vehicles/equipment. These emissions would be temporary and rapidly dissipated.
- 2. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
 - There are no known off-site sources of emissions or odor that may affect the proposal.
- Proposed measures to reduce or control emissions or other impacts to air, if any.
 Standard methods of reducing impacts to air would be employed, including managing exposed soils.

Water

1. Surface Water

present on the property.

- a. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.
 Yes. Lake Washington borders the property to the north. A Category III lake fringe wetland is also
- b. Will the project require any work over, in or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.
 - Yes. Work has and will occur within and adjacent to Lake Washington and the lake fringe wetland. The entire project area is within shoreline jurisdiction.
- c. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of the fill material.
 - A small amount of cobble (less than three cubic yards) that was previously placed in the wetland will be removed by hand.
- d. Will the proposal require surface water withdrawals or diversions? Give a general description, purpose and approximate quantities, if known.
 No.
- e. Does the proposal lie within a 100-year floodplain? NoIf so, note the location on the site plan.

f. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No intentional discharges of waste materials to surface waters would occur. All appropriate BMPs would be implemented to prevent such discharges.

2. Ground Water

a. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

There will be no withdrawal of, or discharge to, ground water associated with implementation of the proposed project.

b. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the followingchemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

There will be no waste material from septic tanks or other sources discharged into the ground as part of the proposed project.

3. Water Runoff (including stormwater)

a. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

No new sources of water runoff are proposed as part of the project. Runoff quantities and flow patterns are not expected to change markedly from the pre-existing condition.

- Could waste materials enter ground or surface waters? If so, generally describe.
 During construction activities, fuel, lubricant or other material spills from equipment could enter ground or surface waters. However, spill cleanup equipment would be present on-site during construction activities.
- Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site?
 If so, describe.

The improvements are not expected to alter the existing drainage patterns in the vicinity of the site.

Indicate any proposed measures to reduce or control surface, ground and runoff water, and drainage pattern impacts, if any.

Temporary erosion control BMPs would be employed as needed.

Plants

1.	Che	eck the types of vegetation found on the site:
	X	deciduous tree: alder, maple, aspen, other
		evergreen tree: fir, cedar, pine, other
	X	shrubs
	X	grass
		pasture
		crop or grain _
		orchards, vineyards or other permanent crops
	X	wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
	X	water plants: water lily eelgrass, milfoil, other
		other types of vegetation
2.	Wh	at kind and amount of vegetation will be removed or altered?
	spe	pre-existing shoreline setback area was primarily comprised of non-native shrubs and grasses. These cies were removed and replaced with a combination of different non-native species and artificial . No significant trees were removed.
3.	List	any threatened and endangered species known to be on or near the site.
	No l	known threatened or endangered plant species have been documented in the City of Bellevue.
4.		posed landscaping, use of native plants or other measures to preserve or enhance etation on the site, if any.
	miti	artificial turf is proposed for removal and will be replaced with a mix of native plantings. Additional gation planting is also proposed above and below the OHWM of the lake, including within wetland as on site.
5.	Pur	all noxious weeds and invasive species known to be on or near the site. ple loosestrife, reed canarygrass, yellow flag iris, and bird's-foot trefoil have all been observed on the ject property.

Animals

1.	List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:
	Birds: ☐ hawk,☐heron, ☐ eagle, 🗷 songbirds, ☐ other
	Mammals:deer,bear,elk,beaver, 🔀 other <u>small urban mammals</u>
	Fish: bass, K salmon, K trout, herring, shellfish, other
2.	List any threatened and endangered species known to be on or near the site. Adult and juvenile chinook salmon and steelhead trout (listed as Threatened under the Federal Endangered Species Act) migrate through Lake Washington. Adults migrate upstream to reach spawning grounds; juveniles migrate downstream from their natal streams to reach the ocean. Lake Washington also contains coho salmon (Species of Concern under Federal Endangered Species Act). Lake Washington potentially contains bull trout, a salmonid listed as Threatened under the Federal Endangered Species Act.
3.	Is the site part of a migration route? If so, explain. As described above, adult and juvenile salmon migrate up and downstream, respectively, through Lake Washington. Migrating waterfowl may use the lake as resting and foraging areas during spring and fall migrations.
4.	Proposed measures to preserve or enhance wildlife, if any. The proposed mitigation plan includes wetland and upland shoreline restoration. Proposed mitigation measures and compliance with the Bellevue land use code will result in no net loss of shoreline ecological functions, including wildlife habitat function.
5.	List any invasive animal species known to be on or near the site. No known invasive animal species are known to be on or near the site.
Energ	gy and Natural Resources
	What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the
	completed project's energy needs? Describe whether it will be used for heating,
	manufacturing, etc.
	The types of energy likely to be used to implement the proposed plan include gas-powered vehicles/equipment and hand-held equipment. The completed project does not change the current energy needs of the site.
2.	Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
	No.

3. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

No such features are proposed.

Environmental Health

1. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill or hazardous waste, that could occur as a result of this proposal? If so, describe.

Typical environmental health hazards related to construction and landscaping could occur during implementation of the project.

- Describe any known or possible contamination at the site from present or past uses.
 No known contamination is present.
- Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
 No known existing hazardous chemicals or conditions exist that would affect the project.
- c. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Pesticides may be used in the project's landscaping components.

- d. Describe special emergency services that might be required.
 - Special emergency services are not anticipated to be required. In the unlikely event that an accident (spill, fire, other exposure) was to occur involving toxic chemicals or hazardous wastes, the local fire department's hazardous materials team would respond. If necessary, local medical services might also be required. Safety and accident response supplies would be on-site.
- e. Proposed measures to reduce or control environmental health hazards, if any.

 Standard precautions would be taken to ensure the safety of work crews. A crew supervisor would be contacted by a crew member immediately upon discovery of a spill. The crew supervisor would then ensure that the spill is cleaned up in an appropriate manner and would contact the appropriate authorities, if necessary. All pesticide use will follow label directions.

2. Noise

a. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Noise within the vicinity of the project area is primarily limited to vehicular traffic along SE

Shoreland Drive and recreational boating activities in Meydenbauer Bay. However, such noise would not affect project activities.

b. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noises associated with the project would be limited to construction equipment during implementation. However, noise would be limited to normal daytime working hours pursuant to Bellevue City Code 9.18.

Proposed measures to reduce or control noise impacts, if any.
 Noise would be limited to normal daytime working hours pursuant to Bellevue City Code 9.18.

Land and Shoreline Uses

1. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The project site, as well as surrounding properties, are in single-family residential use. The proposal will not affect current land uses.

2. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to non-farm or non-forest use?

No.

- a. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling and harvesting? If so, how?
 No.
- 3. Describe any structures on the site.

The parcel includes a single-family residence.

- 4. Will any structures be demolished? If so, what? No.
- 5. What is the current zoning classification of the site? R-4
- 6. What is the current comprehensive plan designation of the site? SF-H High Density up to 5 units per acre
- 7. If applicable, what is the current shoreline master program designation of the site?

 Shoreline Residential
- 8. Has any part of the site been classified as a critical area by the city or county? If so, specify. Yes, one shoreline associated wetland, Wetland A, is present within the project area. Wetland A is a lake fringe wetland with a small slope component. The wetland rates as a Category III wetland with low habitat functions. The City of Bellevue requires associated wetlands with these scores to have a 60-foot buffer. Habitat associated with Species of Local Importance may also exist on the subject property, due to the proximity to Lake Washington. This includes habitat for Vaux's swift, merlin, purple martin, great blue heron, and common loon, as well as Chinook and coho salmon, bull trout, and river lamprey.
- Approximately how many people would reside or work in the completed project? <u>Not</u> <u>applicable</u>
- 10. Approximately how many people would the completed project displace? **Not applicable**
- 11. Proposed measures to avoid or reduce displacement impacts, if any.

 Not applicable
- 12. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

No such measures are necessary. Proposed activities would not affect existing land use.

13. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any.

No such measures are necessary. Proposed activities would not affect agricultural and forest lands of long-term commercial significance.

Housing

- 1. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
 - Not applicable. No new housing is proposed.

2. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Not applicable. No housing will be eliminated.

3. Proposed measures to reduce or control housing impacts, if any. Not applicable.

Aesthetics

1. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The height of the tallest new retaining wall is approximately 3.5 feet and constructed of concrete blocks.

- 2. What views in the immediate vicinity would be altered or obstructed?

 The project area will resemble the pre-existing condition, though new native plantings may improve views in the vicinity of the project area.
- 3. Proposed measures to reduce or control aesthetic impacts, if any No such measures are necessary.

Light and Glare

1. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No new light or glare will be produced by the proposed activities.

- 2. Could light or glare from the finished project be a safety hazard or interfere with views?

 No.
- 3. What existing off-site sources of light or glare may affect your proposal? Proposed activities would not be affected by off-site sources of light or glare.
- 4. Proposed measures to reduce or control light and glare impacts, if any. No such measures are necessary.

Recreation

1. What designated and informal recreational opportunities are in the immediate vicinity?

The project area is located on the shore of Lake Washington. Lake Washington offers fishing, boating, swimming, and bird watching opportunities.

- 2. Would the proposed project displace any existing recreational uses? If so, describe. **No.**
- Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.
 No such measures are necessary.

Historic and Cultural Preservation

- 1. Are there any buildings, structures or sites located on or near the site that are over 45 years old listed in or eligible for listing in national, state or local preservation registers located on or near the site? If so, specifically describe.
 - According to the Department of Archeology and Historic Preservation's (DAHP) publicly available WISAARD (Washington Information System for Architectural and Archaeological Records Data) website, no historic places or objects are known to be located within the vicinity of the project area.
- Are there any landmarks, features or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.
 - No such landmarks or evidence are known to be on or next to the site.
- 3. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.
 - The Washington Department of Archeology and Historic Preservation's publicly available database has been reviewed for known historic resources in the project area.

4. Proposed measures to avoid, minimize or compensate for loss, changes to and disturbance to resources. Please include plans for the above and any permits that may be required. Should historic, archeological, scientific or culturally significant items be encountered during implementation of activities, work would be temporarily stopped while the appropriate agencies are notified.

Transportation

- Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.
 Access to the site is via SE Shoreland Drive. Access will not change as a result of the project.
- Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?
 The nearest King County Metro transit stop is located at Bellevue Way SE and SE 3rd Street, approximately 0.4 miles from the project area.
- 3. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?
 The proposed plan would not create or eliminate parking spaces.
- Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).
 No.

5. Will the project or proposal use (or occur in the immediate vicinity of) water, rail or air transportation? If so, generally describe.

The project will not use, or occur in the immediate vicinity of, water, rail, or air transportation.

6. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

Traffic generation would not change as a result of the proposed project.

- 7. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

 No.
- 8. Proposed measures to reduce or control transportation impacts, if any. No such measures are necessary.

Public Service

1. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

2. Proposed measures to reduce or control direct impacts on public services, if any. No such measures are necessary.

Utilities

- 1. Check the utilities currently available at the site:
 - **X** Electricity
 - X natural gas
 - **X** water
 - X refuse service
 - **X** telephone

X sanitary sewer septic system other

2. Describe the utilities that are proposed for the project, the utility providing the service and the general construction activities on the site or in the immediate vicinity which might be needed.

No additional utilities are proposed as part of the project that are not already available on site.

Signature

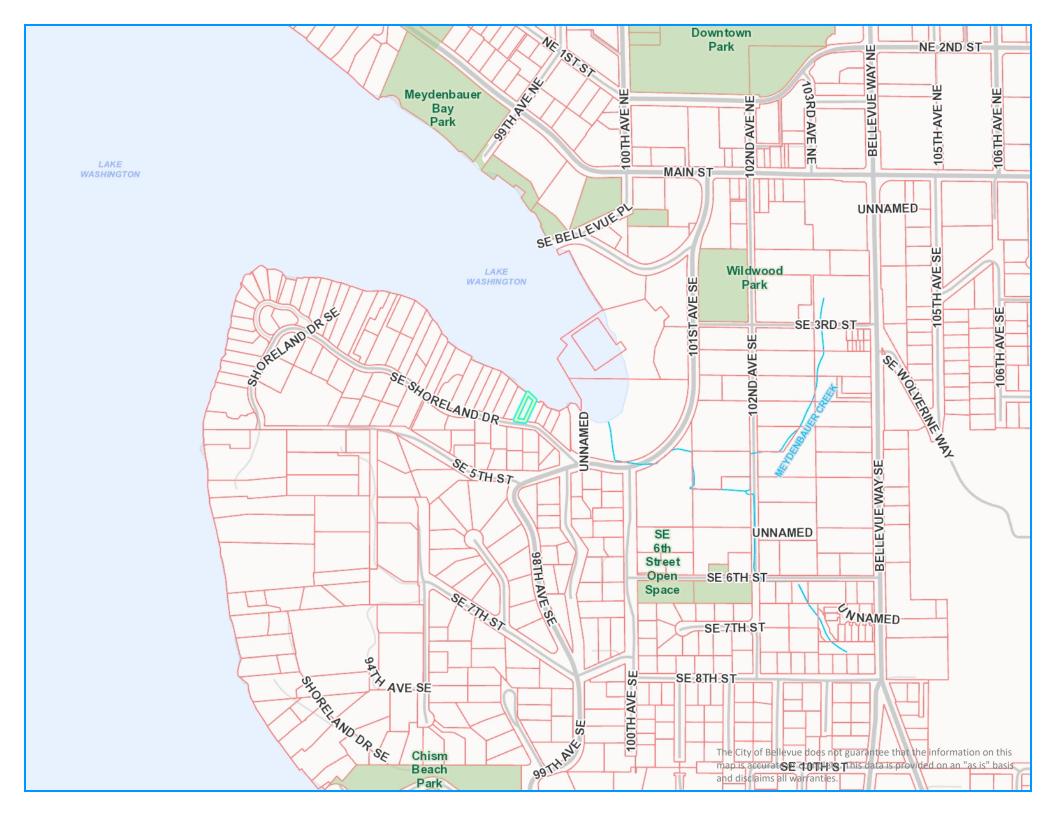
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

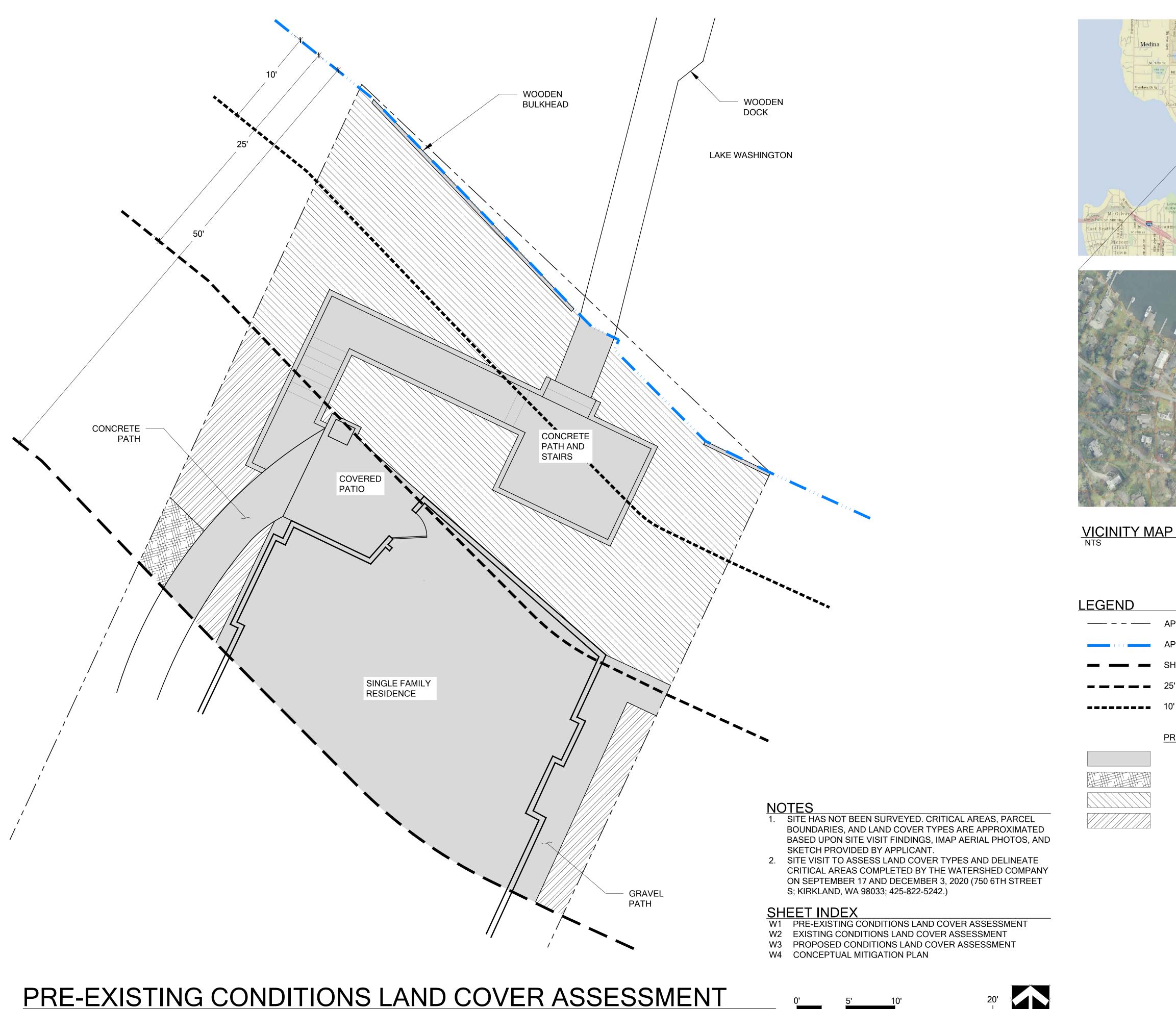
Signature Key Book

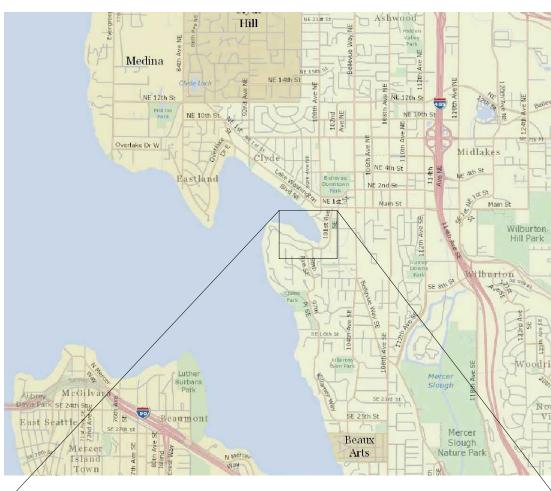
Name of signee Kenny Booth, AICP

Position and Agency/Organization Senior Planner, The Watershed Company

Date Submitted 12-16-21











—— – – — APPROXIMATE PARCEL BOUNDARY

APPROXIMATE OHWM (NON-DELINEATED)

SHORELINE SETBACK (50' FROM OHWM)

25' OFFSET FROM OHWM

10' OFFSET FROM OHWM

PRE-EXISTING LAND COVER TYPES

IMPERVIOUS SURFACE

BARE GROUND / PERVIOUS SURFACE

NON-NATIVE VEGETATION 0-25' FROM OHWM

NON-NATIVE VEGETATION 25-50' FROM OHWM

SHEET SIZE:

ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY. PROJECT MANAGER: JKB

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750 Sixth Street South Kirkland WA 98033

p 425.822.5242 www.watershedco.com

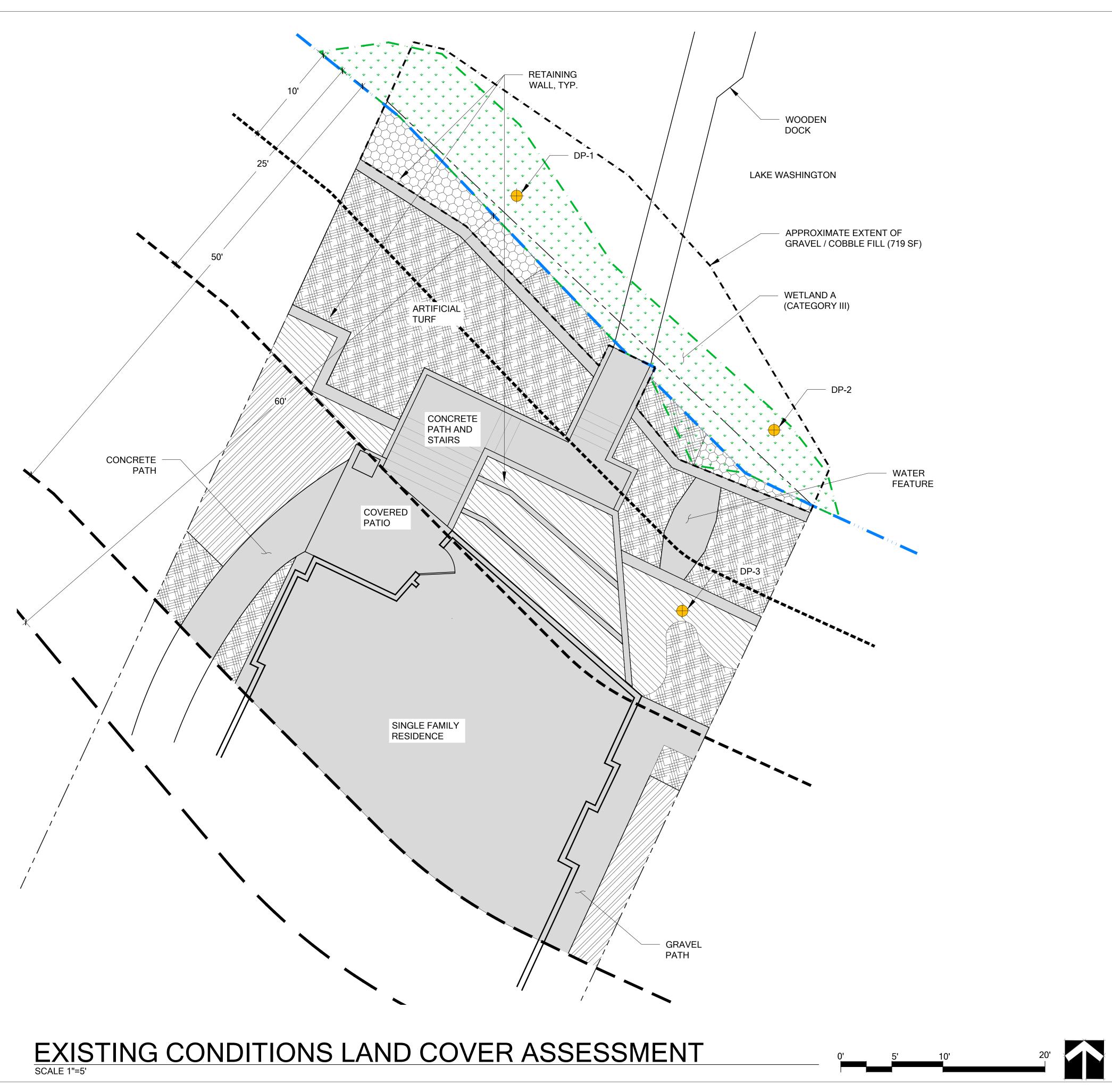
Science & Design

DESIGNED: DRAFTED: CHECKED:

JOB NUMBER: 200908

SHEET NUMBER:





<u>LEGEND</u>

- 1. SITE HAS NOT BEEN SURVEYED. CRITICAL AREAS, PARCEL BOUNDARIES, AND LAND-COVER TYPES ARE APPROXIMATED BASED UPON SITE VISIT FINDINGS, IMAP AERIAL PHOTOS, AND SKETCH PROVIDED BY APPLICANT
- 2. SITE VISIT TO ASSESS LAND COVER TYPES AND DELINEATE CRITICAL AREAS COMPLETED BY THE WATERSHED COMPANY ON SEPTEMBER 17 AND DECEMBER 3, 2020 (750 6TH STREET S; KIRKLAND, WA 98033; 425-822-5242.)



750 Sixth Street South Kirkland WA 98033

p 425.822.5242

www.watershedco.com Science & Design

APPROXIMATE PARCEL BOUNDARY A 품 품 关 APPROXIMATE OHWM (NON-DELINEATED) SHORELINE SETBACK (50' FROM OHWM) APPROXIMATE WETLAND AREA APPROXIMATE WETLAND BUFFER (60')

EXISTING LAND COVER TYPES

IMPERVIOUS SURFACE

DATA POINT (DP)

25' OFFSET FROM OHWM

10' OFFSET FROM OHWM

BARE GROUND / PERVIOUS SURFACE

NON-NATIVE VEGETATION 0-25' FROM OHWM

NON-NATIVE VEGETATION 25-50' FROM OHWM

MIXED NATIVE / NON-NATIVE VEGETATION LANDWARD OF OHWM

SCALE ACCORDINGLY. DESIGNED: DRAFTED: CHECKED:

JOB NUMBER: 200908 SHEET NUMBER:

OF 4

SHEET SIZE: ORIGINAL PLAN IS 22" x 34".



IMPACT CALCULATIONS

SHORELINE DEBIT CALCULATIONS

EXISTING LAND COVER OF AREAS TO BE IMPACTED	AREA (SF)	EXISTING VALUE	FINAL VALUE	CHANGE IN LAND COVER VALUE	TOTAL DEBIT
NON-NATIVE (0-25') TO IMPERVIOUS	152	0.3	0.0	0.3	45.6
NON-NATIVE (0-25') TO BARE GROUND/PERVIOUS	30	0.3	0.15	0.15	4.5
NON-NATIVE (25-50') TO BARE GROUND/PERVIOUS	37	0.25	0.15	0.10	3.7
			,	TOTAL:	53.8

SHORELINE CREDIT CALCULATIONS

PROPOSED LAND COVER TYPES	AREA (SF)	EXISTING VALUE	FINAL VALUE	CHANGE IN LAND COVER VALUE	TOTAL CREDIT
NON-NATIVE, 0-25' (FROM IMPERVIOUS)	0	0.0	0.3	0.3	0
NON-NATIVE, 25-50' (FROM IMPERVIOUS)	41	0.0	0.25	0.25	10.25
NATIVE, 0-10' (FROM IMPERVIOUS)	51	0.0	1.0	1.0	51
BARE GROUND/PERVIOUS (FROM IMPERVIOUS)	2	0.0	0.15	0.15	0.3
NATIVE, 0-10' (FROM NON-NATIVE)	352	0.3	1.0	0.7	246.4
NATIVE, 0-25' (FROM NON-NATIVE)	789	0.3	0.8	0.5	394.5
				TOTAL:	702.45



APPROXIMATE PARCEL BOUNDARY

APPROXIMATE OHWM (NON-DELINEATED)

SHORELINE SETBACK (50' FROM OHWM)

APPROXIMATE WETLAND AREA

25' OFFSET FROM OHWM

10' OFFSET FROM OHWM

APPROXIMATE WETLAND BUFFER (60')

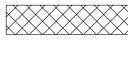
EXISTING LAND COVER TYPES TO REMAIN

IMPERVIOUS SURFACE BARE GROUND / PERVIOUS SURFACE

NON-NATIVE VEGETATION 0-25' FROM OHWM

NON-NATIVE VEGETATION 25-50' FROM OHWM

PROPOSED LAND COVER TYPES



IMPERVIOUS TO NATIVE VEGETATION, 0-25' (186 SF)

NON-NATIVE VEGETATION TO

NATIVE VEGETATION, 0-25' (735 SF)

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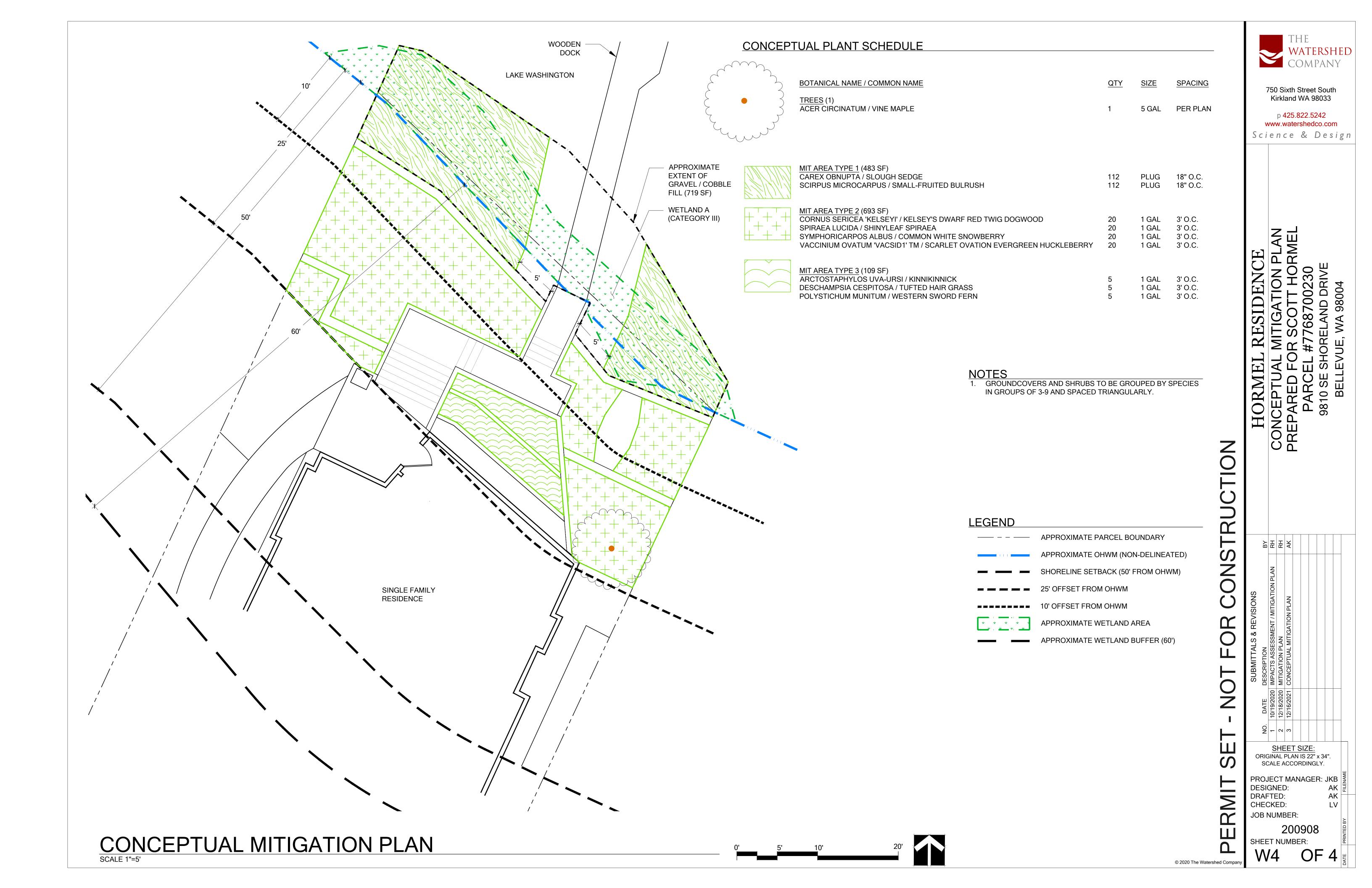
SHEET SIZE: ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY.

PROJECT MANAGER: JKB DESIGNED: DRAFTED: CHECKED:

JOB NUMBER: 200908

SHEET NUMBER: OF 4





Special Shoreline Report

Hormel Residence City of Bellevue

December 10, 2021

Prepared for:

City of Bellevue PO Box 90012 Bellevue, WA 98009 9012

Prepared on behalf of (applicant):

Scott Hormel 9810 SE Shoreland Drive Bellevue, WA 98004





Title-page image: View looking toward subject property from Lake Washington (December 3, 2020).

Report Disclaimer: The information contained in this report is based on the application of technical guidelines currently accepted as the best available science and in conjunction with the manuals and criteria outlined in the methods section. All discussions, conclusions and recommendations reflect the best professional judgment of the author(s) and are based upon information available at the time the study was conducted. All work was completed within the constraints of budget, scope, and timing. The findings of this report are subject to verification and agreement by the appropriate local, state and federal regulatory authorities. No other warranty, expressed or implied, is made.



750 Sixth Street South Kirkland, WA 98033

p 425.822.5242f 425.827.8136watershedco.com

The Watershed Company Reference Number: 200908 The Watershed Company Contact: Kenny Booth, AICP

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Mitigation Plan

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1. Introduction

1.1 Background and Purpose

The purpose of this report is to document potential shoreline and shoreline setback impacts associated with a residential redevelopment project located on the shore of Meydenbauer Bay in the City of Bellevue, Washington (Figure 1), and how the proposal will result in no net loss of shoreline ecological function in compliance with the requirements of the City's Shoreline Master Program (SMP). The subject property is comprised of a single lot which is currently developed with a single-family residence. Unpermitted work occurred within the shoreline setback in 2018, resulting in minor modifications to hardscape and landscape areas within the setback. The preexisting condition included a wood bulkhead at the ordinary high water mark (OHWM), concrete stairs and retaining walls, and areas of planting. Improvements carried out in 2018 included a reconfiguration of the stairs and retaining walls, and the addition of artificial turf. In addition, the wood bulkhead was removed, with a new upland retaining wall holding grade further away from the shoreline. Impervious surfaces waterward of the residence did not increase as a result of these improvements. As part of retroactive permitting of the reconfiguration of improvements within the shoreline setback, the turf will be removed and replaced with plantings. Retroactive approval is sought from the City of Bellevue for the other improvements, which will remain.

The replacement bulkhead complies with the City of Bellevue shoreline regulations for replacement of existing shoreline stabilization features, with the exception of the provision that the structure be intended for protection of property. Specifically, LUC 20.25E.080.F.6.b indicates that the stabilization structure must be needed to protect the property or structures from erosion caused by currents or waves. However, in this case the stabilization structure is required to protect the property by holding grade and combating <u>upland</u> erosion/sloughing. Thus, the project proposes a slight deviation from the shoreline stabilization regulations.

The Bellevue Shoreline Master Program (SMP) allows deviation from certain SMP requirements through the Special Shoreline Report Process (LUC 20.25E.160) when it can be demonstrated that the proposal with requested modifications leads to equivalent or better protection of shoreline ecological functions and values than would result from the strict application of the code. LUC 20.25E.160.E.5 details specific report content requirements and LUC 20.25E.160.E.6 requires demonstration of compliance with specific criteria as part of any modification. This report fulfills these criteria.

Impacts and mitigation related to unauthorized work within the on-site wetland are addressed in the *Wetland Delineation, Impact Assessment, and Restoration Plan* (Wetland Report), dated December 18, 2020, prepared by the Watershed Company.

1.2 Methods

An ecologist and landscape designer from The Watershed Company visited the site on September 17, 2020, to evaluate the existing site conditions. A second site visit was performed on December 3, 2020, to conduct a wetland and ordinary high water mark delineation. Vegetative structure and composition, special habitat features, presence of wildlife species and human disturbances were also assessed, which inform the discussions presented in this report. Results of the delineation are documented in the Wetland Report and were utilized in preparation of the associated Mitigation Plan (Appendix A).

2. Subject Property

2.1 Location and Description

The subject property is located at 9810 SE Shoreland Drive (parcel 7768700230) in the City of Bellevue. Lake Washington borders the project area to the north, and single-family residences are located to the south, east and west. Lake Washington is designated as a Shoreline of the State and the project area is within the shoreline jurisdiction of Lake Washington, within the Shoreline Residential (SR) environment designation. The SR environment designation requires a standard 50-foot shoreline structure setback, measured from the OHWM and a 50-foot shoreline vegetation conservation area (SVCA), also measured from the OHWM.

The subject property is approximately 7,750 SF and is narrower than deep, extending over 150 feet landward from the lake. The parcel has approximately 60 feet of shoreline frontage and slopes moderately toward the lake with an approximate 25-foot elevation change from the road to the lake. The property includes an existing single-family residence, located approximately 25-30 feet from the shoreline, and appurtenant features including hardscapes and vegetated areas between the house and lake. Unpermitted work occurred within the shoreline setback in 2018, resulting in minor modifications to hardscape and landscape areas within the setback. The pre-existing condition included a wood bulkhead at the ordinary high water mark (OHWM), concrete stairs and retaining walls, and areas of planting. Improvements included reconfiguration of walkways and stairs, vegetation revisions and turf installation, installation of a water feature to account for the discharge of surface water runoff in the area, and bulkhead removal and replacement.

The site is situated in the East Lake Washington – Bellevue North drainage basin of the Cedar-Sammamish Watershed (WRIA 8). According to the Natural Resources Conservation Service Web Soil Survey, the site is characterized by Kitsap silt loam soils. Any surface or groundwater on the site would be expected to flow north toward the lake.





Figure 1. Vicinity and street level map (King County iMap).

2.2 Critical Areas

2.2.1 Wetlands

One shoreline associated wetland, Wetland A, is present within the study area. Wetland A is a lake fringe wetland with a small slope component. The wetland rates as a Category III wetland with low habitat functions. The City of Bellevue requires associated wetlands with these scores to have a 60-foot buffer.

2.2.2 Species of Local Importance

The City of Bellevue designates habitat associated with species of local importance as a critical area [LUC 20.25H.150(B)]. As further described in Section 2.3 below, wildlife use on site is expected to be limited to mainly urban species due to the densely developed surroundings, and is further limited by the lack of large trees on site. However, it is possible that some habitat on site could occasionally be used by species of local importance, especially given the proximity to Lake Washington. Species of local importance [LUC 20.25H.150(A)] for which suitable habitat exists on the study property are Vaux's swift, merlin, purple martin, great blue heron, and common loon. Potential fish use of Lake Washington includes Chinook and coho salmon, bull trout, and river lamprey. The likelihood of each of these species utilizing the property is discussed below.

Vaux's swifts forage in open skies over forests, lakes, and rivers, where insects are abundant. Lake Washington provides suitable foraging habitat, and the species may be present at times over the study area. Nesting normally takes place in old-growth forest where large, hollow snags are available. The study parcel does not provide nesting habitat for this species.

Merlins occur throughout western Washington in winter and during migration. Breeding birds are rare in the state. Occurrences are spotty but not uncommon in suburban areas, and the study parcel may provide a small amount of suitable hunting or perching area in the non-breeding season.

Purple martin is Washington State's least common swallow. The species forages over open water and could potentially use the lake area adjacent to the study property for foraging. There are no suitable standing snags available on the subject property for cavity-nesting.

Great blue herons are widespread in western Washington. Outside of breeding, which occurs in tall trees, commonly away from human disturbance, the birds are most often observed in and along rivers, lakes, and wetlands. The associated wetland and adjacent waters of Lake Washington are likely used by foraging and resting herons throughout the year.

Common loons prefer large, secluded lakes in the eastern part of the state for breeding. In winter, the species is most common on the coast and in saltwater bays and inlets, but can be seen on freshwater lakes near the coast as well. The open waters of Lake Washington are commonly used by wintering loons, but the species is unlikely to enter the study parcel.

Chinook and coho salmon migrate through Lake Washington. The lake itself does not provide spawning habitat. The lake is used by juveniles for migration, as well as rearing. Lake temperatures are warmer than preferred by these species, particularly in shallow areas, and outside of the existing pier, the shoreline area provides no cover for hiding or cooling. The lake area immediately adjacent to the property is unlikely to be used extensively by these species.

Bull trout are rare or non-existent in Lake Washington. The species has a narrow temperature tolerance range, and is very unlikely to occur near the shallow waters adjacent to the study area.

River lamprey have been identified in Lake Washington. According to the U.S. Fish and Wildlife Service, the species has declined, present status is unknown, and little is known about their biology.

Other species including bald eagle, pileated woodpecker, osprey and red-tailed hawk are common over Lake Washington and may occasionally pass through the subject parcel on their way to more suitable habitat. However, the lack of large trees on site limits perching or nesting habitat and it is unlikely that these species would use the site for any significant period of time.

2.3 Vegetation and Habitat Conditions

A comparison of aerial photos from 2015, 2017, and 2019 shows that some vegetation within the wetland and shoreline area has been displaced by the placement of cobble and gravel. The addition of cobble and gravel has altered the native substrate of this area, which appears to be a silty loam or mucky loam in adjacent undisturbed areas. The primary result of this alteration is the overall cover of vegetation within the wetland area has been reduced. Wetland vegetation plays a key role in improving water quality as well as providing wildlife habitat. Plants have the ability to trap and hold sediments and remove excess nutrients and toxins from the water. Additionally, vegetation, particularly woody plants, have the ability to dissipate wave energy from storms and boat-drive wake which could otherwise erode shorelines or damage property. These primary wetland functions have been reduced as a result of the gravel/cobble placement and loss of shoreline vegetation.

Based upon field observations, it appears that some vegetation has reestablished since 2019, however the majority of the vegetation that has reestablished is not native to the region. Some species are listed on the King County Noxious Weed List/Weeds of Concern list including purple loosestrife (control is required in King County), reed canarygrass, yellow flag iris, and bird's-foot trefoil. This composition of species are aggressive colonizers that will outcompete most native plants and they do not support native terrestrial or aquatic fauna to the degree that native plants otherwise would.



Figure 2. View from the dock of the replacement bulkhead, shoreline and upland areas (12.3.20)



Figure 3. Detail of replacement bulkhead with turf landward and wetland vegetation with cobble/gravel waterward (12.3.20)



Figure 4. Overview of shoreline area facing toward the lake with water feature in foreground (12.3.20)



Figure 5. Detail of upland landscaped areas (12.3.20)

Off-site Habitat

The opportunity for the subject property to provide habitat is dependent upon the potential for the greater vicinity to act as a source for wildlife. Therefore, the presence or absence of habitat patches in the landscape surrounding the subject property is considered in this assessment.

The general habitat type used to categorize the study area vicinity is Urban and Mixed Environs in the Medium-density Zone (Johnson and O'Neil 2001). This habitat type contains dense residential development and some natural open spaces.

The area surrounding the subject property is urban and dominated by developed single-family residential land uses. Habitat areas within approximately 1/4 mile of the project site include Lake Washington and less intensely developed residential lots, primarily to the southwest. Some of these lots are larger and/or include more retained significant trees, resulting in areas of interconnecting canopy cover. However, these habitat patches in the vicinity are mostly disconnected from on-site habitat by roads and development.

Wildlife

Wildlife species expected to utilize the project site most are species that are adapted to living in urban settings, and that are not closely associated with wetland or stream environments. These species generally include raccoons, opossums, Eastern gray squirrel, rats, mice, bats, and a number of birds like crows, starlings, robins, chickadees, and sparrows, to name a few.

During site investigations, no species of local importance were observed on the subject property, nor was habitat was observed that is expected to have a primary association with any species of local importance given the local- and landscape-level conditions (see section 2.2.2).

3. SMP Regulations

3.1 Replacement of Existing Shoreline Stabilization

LUC 20.25E.080.F.6.b states that legally established existing shoreline stabilization may be replaced with similar structure(s) if there is a demonstrated need to protect principal use(s), structure(s), or property from erosion caused by currents or waves. A qualified professional must prepare a written report demonstrating the need and considering the following factors:

i. An assessment of the necessity for stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, wave fetch, and location of the nearest structure.

- ii. An assessment of erosion potential resulting from the action of waves or other natural processes operating at or waterward of the OHWM in the absence of the shoreline stabilization.
- iii. An assessment of the feasibility of using nonstructural or soft structural stabilization measures in lieu of hard structural shoreline stabilization measures. Soft stabilization may include the use of gravel, cobbles, boulders, and logs, as well as vegetation.

3.1.1 Modification

The requirements of LUC 20.25E.080.F may be modified through a special shoreline report pursuant to LUC 20.25E.160.E. The report is intended to provide flexibility for proposals providing unique design, or protection of shoreline area functions and values, not anticipated by the code and must demonstrate that the proposal with requested modifications leads to equivalent or better protection of shoreline ecological functions and values than would result from the strict application of the requirements.

3.1.2 Shoreline Functions Based on Application of Code Standards

If the regulations and standards of the LUC regarding replacement of shoreline stabilization structures were applied to this site, the replacement bulkhead may not be approved as the need for the structure is not from erosion caused by currents or waves. The old wood bulkhead, which preceded the current one, was located closer to the lake and would have had to remain. The replacement bulkhead is located further landward which allows the area waterward to be restored. If the replacement structure were not allowed this area would remain impacted by the further waterward structure. Furthermore, without either wall the upland portion of the shoreline area would be at risk of erosion.

4. Project

4.1 Description

The proposed project involves replacement of a residential bulkhead. Unpermitted work occurred in 2018 including removal of the old wood bulkhead, which was located at the OHWM, and installation of the new cement block bulkhead which is located further landward. Additional minor modifications to hardscape and landscape areas within the shoreline setback were also completed in 2018. These improvements included the following:

- Relocation of stairs. The pre-existing stairs that provided access from the residence to
 the shoreline/dock came off the west side of the house. These stairs were removed
 and new stairs added at the north side of the house.
- Reconfiguration of walkway. The pre-existing walkway to the shoreline/dock was slightly reconfigured. Reconfiguration included an overall decrease in the length of the walkway since the new stairs were more centrally located to the shoreline area.
- Retaining walls. In addition to the replacement bulkhead/wall, new retaining walls
 were added in several locations to help support grade changes. This included a
 series of walls parallel and upland of the concrete pathway. These walls were
 intended to help support grade near the house, as signs of erosion had become
 evident.
- Vegetation revisions. The pre-existing shoreline setback area was primarily comprised of non-native shrubs and grasses. These species were removed and replaced with a combination of different non-native species and artificial turf.
- Water feature. An ornamental water feature was added near the shoreline to account for the discharge of surface water runoff in the area.

As part of retroactively permitting these actions the artificial turf is proposed to be removed and replaced with native plantings. All other improvements are proposed to remain.

4.2 Mitigation Sequencing

Pursuant to LUC 20.25E.060.D.2, a mitigation sequencing analysis has been completed to assure that the proposal will meet the no net loss provisions by avoiding, minimizing, and mitigating for any adverse impacts to shoreline ecological functions or processes.

Avoidance. As previously mentioned, the project site includes a standard 50-foot shoreline structure setback, as well as the 50-foot SVCA. Improvements included reconfiguration of hardscape and landscape features. Work within the shoreline setback cannot be avoided as the improvements were previously installed without permits. A bulkhead/wall cannot be avoided, as it is necessary to hold the grade of the site and prevent erosion in the upland shoreline area.

Minimization. Minimization techniques were utilized during the previous implementation of improvements. This included a shortening of the overall stair/pathway length, the removal of the old wood bulkhead, and locating the replacement bulkhead further landward. Additional minimization is now proposed by replacing the previously installed turf with plantings.

Mitigation. As mitigation for shoreline impacts (discussed in Section 4.3), a total of 155.9 shoreline credits are proposed (see Section 4.4). Shoreline credits include the previous

conversion of impervious surface to non-native vegetation, native vegetation, and bare-ground/pervious features. Additionally, the previously installed turf will be removed and replaced with native plantings. Proposed species include slough sedge, small-fruited bullrush, red-twig dogwood, spiraea, snowberry, evergreen huckleberry, kinnikinnik, western sword fern, and tufted hairgrass. Details are provided in Section 4.4 and Appendix A.

4.3 Impacts

Installed improvements occur within the standard 50-foot shoreline structure setback, as well as the 50-foot SVCA. Hardscape and landscape improvements occurred between the residence and the shoreline. Impacts are to be calculated pursuant to LUC 20.25E.065.F.8.c.i. Table 1 below summarizes proposed impact calculations.

Table 1.	Shoreline	Debit Calculations

Existing Land Cover of Areas to be Impacted	Area (SF)	Existing Value	Final Value	Change in Land Cover Value	Total Debit
Non-native (0-25') to impervious	152	0.3	0.0	0.3	45.6
Non-native (0-25') to bare ground/pervious	30	0.3	0.15	0.15	4.5
Non-native (25-50') to bare ground/pervious	37	0.25	0.15	0.10	3.7
				TOTAL:	53.8

As seen in Table 1 above, a total of 53.8 shoreline debits resulted from unpermitted activities. This includes areas of new concrete stairs and walkway, retaining walls, and the water feature. These new impacts occurred over areas of non-native vegetation.

4.3.1 Cumulative Impacts

Impacts that result from collective changes over the landscape have the potential to affect habitat over time. The area within the vicinity of the project site is almost entirely developed with single-family residences. While some development or re-development can be expected, the overall character of the urban setting in not likely to change substantially. Residential neighborhoods, and other urban areas, do trend toward less mature native vegetation and more ornamental vegetation and impervious surface. The proposed project is consistent with this trend in that some vegetated areas will be replaced with development and increased impervious surface. However, the functions of retained habitat will be improved, not further degraded, once proposed mitigation activities are considered. Retained habitat is not likely to be developed further because of the presence of regulated shoreline setbacks.

In the event that nearby, undeveloped land is developed in a manner similar to what is proposed for this project, anticipated changes to habitat in the landscape may include a reduction in habitat quantity, increased habitat fragmentation and disturbance, and improved quality of retained habitat areas. Overall, the cumulative impacts to urban habitat from relatively small development proposals like this one are expected to be minor. This is primarily due to the fact that the majority of the surrounding area has already been developed and is unlikely to substantially change in the foreseeable future. Additionally, similar proposals may require restoration of degraded habitat areas (as does this one), in which case, wildlife habitat would benefit.

4.4 Mitigation

As mitigation for shoreline impacts summarized in Table 1, a total of 702.45 shoreline credits are proposed. Shoreline credits include the conversion of impervious surface to non-native vegetation, native vegetation, and bare-ground/pervious features. Proposed species include slough sedge, small-fruited bullrush, red-twig dogwood, spiraea, snowberry, evergreen huckleberry, kinnikinnik, western sword fern, and tufted hairgrass. Shoreline credits are summarized in Table 2 below.

Table 2	Table 2	Charolina	Cradit	Calculations
Table 7.	Table 7.	Snoreline	Credit	Caiculations

Proposed Land Cover Types	Area (SF)	Existing Value	Final Value	Change in Land Cover Value	Total Credit
Non-native, 0-25' (from impervious)	0	0.0	0.3	0.3	0
Non-native, 25-50'(from impervious)	41	0.0	0.25	0.25	10.25
Native, 0-10' (from impervious)	51	0.0	1.0	1.0	51
Bare ground/pervious (from impervious)	2	0.0	0.15	0.15	0.3
Native, 0-10' (from non-native)	352	0.3	1.0	0.7	246.4
Native, 0-25' (from non-native)	789	0.3	0.8	0.5	394.5
TOTAL:				TOTAL:	702.45

Proposed shoreline credits, totaling 702.45, account for necessary mitigation to offset proposed impacts of 53.8 debits, pursuant to LUC 20.25E.065.F.8.c. Plantings will comply with the standards of LUC 20.25E.065.F.8.g. Overall, proposed mitigation measures will result in no net loss of shoreline ecological functions.

5. Special Shoreline Report Criteria

As previously mentioned, SMP requirements for replacement of shoreline stabilization structures may be modified pursuant to LUC 20.25E.160.E, through a special shoreline report.

Per the LUC, the special shoreline report must meet specific minimum requirements in order for the Director to approve a proposal to modify the regulations. Compliance with the relevant requirements are addressed below.

LUC 20.25E.160.E.5.b – Minimum Report Requirements

i. The lake classification and environment designation as outlined in the **City** of Bellevue GIS mapping.

The lake classification and environment discussed is included in Section 2.1.

ii. Identification and classification of all shoreline setbacks and any critical areas and critical area buffers on the site and abutting properties.

Critical areas and buffers located on or adjacent to the subject property are described in Section 2.2. Shoreline setbacks are discussed in Section 2.1.

iii. Identification of each regulation or standard of this code proposed to be modified.

The replacement bulkhead complies with the City of Bellevue shoreline regulations for replacement of existing shoreline stabilization features, with the exception of the provision that the structure be intended for protection of property. Specifically, LUC 20.25E.080.F.6.b indicates that the stabilization structure must be needed to protect the property or structures from erosion caused by currents or waves. However, in this case the stabilization structure is required to protect the property by holding grade and combating <u>upland</u> erosion/sloughing. Thus, the project proposes a slight deviation from the shoreline stabilization regulations.

iv. A vegetative cover and habitat analysis, including existing aquatic vegetation, setbacks and upland area. (Use of the Bellevue Urban Wildlife Habitat Functional Assessment Model is required if credit is sought for wildlife habitat functions outside the shoreline setback and aquatic area)

Habitat is assessed in Section 2.

 An assessment of the probable cumulative impacts to the shoreline area resulting from development of the site and the proposed development;

Cumulative impacts are discussed in Section 4.3.1.

- vi. An analysis of the level of protection of shoreline ecological functions and values provided by the regulations or standards of this Code, compared with the level of protection provided by the proposal. The analysis shall include:
 - (1) A discussion of the functions and values currently provided by the aquatic zone, shoreline setback and shoreline upland area on the site and their relative importance to the ecosystem in which they exist;
 - (2) A discussion of the functions and values likely to be provided by the shoreline setback area on the site through application of the regulations and standards of this Code over the anticipated life of the proposed development;
 - (3) A discussion of the functions and values likely to be provided by the shoreline setback and upland area on the site through the modifications included in the proposal over the anticipated life of the proposed development;
 - (4) A discussion of the mitigation requirements applicable to the proposal pursuant to relevant performance and mitigation standards, and a recommendation for additional or modified mitigation, if any; and
 - (5) Any additional information required for the specific use as specified in the sections of this part addressing that use.

As described in Section 3.1.2, the replacement bulkhead would not be allowed in the proposed location since it does not protect structures or property from erosion caused by currents or waves. The pre-existing wood bulkhead did also not provide this function. This situation relates to a combination of two primary factors:

- 1) The site is located within the interior of Meydenbauer Bay, where storm and boat-driven waves are diminished compared to open areas of Lake Washington; and
- 2) The shoreline setback on the subject parcel slopes considerably from the residence to the shoreline.

In consideration of these two factors, the wall is not needed to protect the property or structures from currents or waves. Instead, the wall is necessary to account for this change in grade and to ensure that upland areas of the setback do not experience erosion or sloughing.

Regarding functions and values of the aquatic zone, shoreline setback, and shoreline upland zone, the replacement of the wood bulkhead with a concrete block wall results in an improvement of functions related to these areas. Specifically, the replacement wall is located further landward (ranging between one and six feet) than the pre-existing wall. The landward relocation of the wall will provide for an improvement in nearshore aquatic functions, including a more natural gradient at the site's interface with the ordinary high water mark. In turn, this will help to attenuate any wave energy at the site and will improve shallow water habitat for

juvenile salmonids. Combined with the proposed upland conversion of impervious surfaces and non-native vegetation to native plantings, this will result in an improved shoreline structure, filtering of stormwater by native plantings, increased habitat structural and compositional complexity, and an increase in organic material to the food chain. Therefore, shoreline ecological functions and values will be improved through approval of the requested deviation.

LUC 20.25E.160.E.6 - Decision Criteria

a. The proposal includes plans for restoration of <u>shoreline</u> aquatic area, <u>setback</u> or upland area such that there is a measurable net gain in overall <u>shoreline</u> and <u>critical area</u> functions;

A mitigation plan is included in Appendix A and provides for a functional lift in overall shoreline and critical area functions. Specifically, the quality of habitat will be increased by replacing non-native species and impervious surfaces with a dense and diverse native plant assemblage appropriate to the eco-region and growing conditions on-site. New plantings will provide food, cover, and nesting opportunities for wildlife. Plantings will also aid in rain and surface water interception and transpiration. New vegetation will improve soil quality, which generally improves water infiltration into the soil. The dense woody stems will also provide vertical structure that can trap sediments and pollutants that would otherwise flow into the lake (and wetland). Overall, the proposed project will result in a net gain in shoreline and critical area functions.

b. The proposal includes plans for restoration of degraded <u>setback</u> or <u>shoreline</u> area such that there is a measurable net gain in the most important <u>shoreline</u> aquatic or <u>habitat</u> functions on the <u>site</u>;

The most important ecological function provided on the site relates to water quality. The proposed conversion of non-native vegetation and impervious surfaces to native vegetation will result in an overall improvement to water quality functions provided by the shoreline setback (and wetland buffer). Specifically, the addition of extensive native plantings improves rain and surface water interception and evapotranspiration functions adjacent to the lake (and wetland). The new vegetation also improves soil quality, which generally improves water infiltration into the soil. Erosion potential is also reduced through these actions. The dense woody stems provide vertical structure that can trap sediments and pollutants that would otherwise flow into the lake (and wetland). Overall, a net gain in water quality and hydrology functions within the shoreline setback (and wetland buffer) will result from installation of the mitigation plantings.

c. The proposal includes a net gain in storm water quality function by the <u>shoreline</u> <u>setback</u> or by elements of the <u>development</u> proposal outside of the reduced regulated <u>shoreline</u> <u>setback</u>;

See previous response.

d. Adequate resources to ensure completion of any required restoration, <u>mitigation</u> and monitoring efforts;

The applicant will comply with any City requirements related to installation or performance assurance devices, as well as any long-term monitoring requirements.

e. The modifications and performance standards included in the proposal are not detrimental to the <u>functions and values</u> of <u>shoreline setbacks</u> and <u>critical areas</u> off <u>site</u>; and

Proposed mitigation will restore on-site wetland and wetland buffer functions while improving shoreline setback functions through the conversion of non-native vegetation and bare/pervious surfaces to areas of native vegetation. Mitigation activities will have positive effects on nearby off-site areas as well by improving overall habitat and water quality functions in the area.

f. The resulting <u>development</u> is compatible with other uses and <u>development</u> in the same <u>land use</u> district.

The proposed project is compatible with adjacent properties and surrounding development within the same land use district. Adjacent properties include residential land uses with appurtenant landscaping and hardscaping features.

6. Summary

The project includes the retroactive permitting for the reconfiguration of hardscaping and landscaping within the shoreline setback of Lake Washington. Compensation for land cover type conversion includes mitigation as required by LUC 20.25E.065. Mitigation consists of the planting of native vegetation and the conversion of impervious surfaces to pervious features. Compliance with the shoreline vegetation provisions of LUC 20.25E.065.F, as demonstrated within this report, will result in no net loss of shoreline ecological functions.

The parcel also includes one lake fridge wetland that has been impacted with the placement of gravel and cobble fill, resulting in a decrease of vegetation and associated loss of water quality and habitat functions. As demonstrated in the separately submitted Wetland Report, the

proposed mitigation plan will restore these functions and ensure there is no decrease in critical area functions and values.

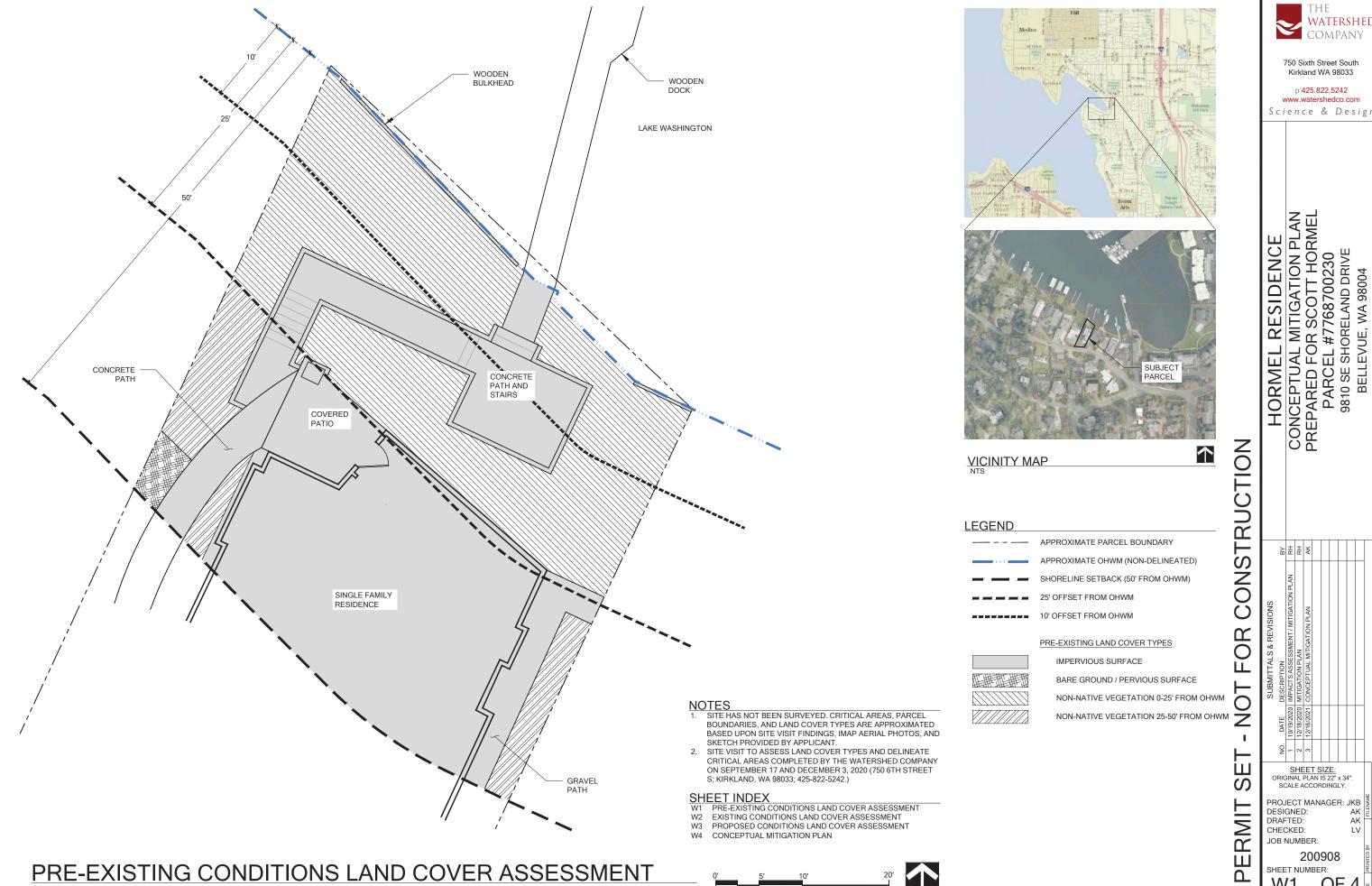
As part of hardscape reconfigurations within the shoreline setback, an existing wood bulkhead was removed and replaced with a concrete block retaining wall, positioned further landward. Rather than protect the property from lake-based erosion, the pre-existing bulkhead, along with the replacement wall, hold grade and combat upland erosion/sloughing. As such, the replacement wall deviates slightly from the provisions authorizing replacement of shoreline stabilization features (LUC 20.25E.080.F.6.b). This document demonstrates compliance with the allowed deviation process established in LUC 20.25E.160.E, thereby justifying the replacement wall.

References

The Watershed Company. 2020. Technical Memorandum: Wetland Delineation, Impact Assessment, and Restoration Plan.

Appendix A

Mitigation Plan



750 Sixth Street South Kirkland WA 98033

Science & Design

SCALE ACCORDINGLY.

200908



NOTES

1. SITE HAS NOT BEEN SURVEYED. CRITICAL AREAS, PARCEL BOUNDARIES, AND LAND-COVER TYPES ARE APPROXIMATED BASED UPON SITE VISIT FINDINGS, IMAP AERIAL PHOTOS, AND

SKETCH PROVIDED BY APPLICANT.
SITE VISIT TO ASSESS LAND COVER TYPES AND DELINEATE
CRITICAL AREAS COMPLETED BY THE WATERSHED COMPANY
ON SEPTEMBER 17 AND DECEMBER 3, 2020 (750 6TH STREET S; KIRKLAND, WA 98033; 425-822-5242.)

750 Sixth Street South Kirkland WA 98033

p 425.822.5242

www.watershedco.com

Science & Design

HORMEL RESIDENCE
CONCEPTUAL MITIGATION PLAN
PREPARED FOR SCOTT HORMEL
PARCEL #7768700230
9810 SE SHORELAND DRIVE
BELLEVUE, WA 98004

APPROXIMATE PARCEL BOUNDARY APPROXIMATE OHWM (NON-DELINEATED)

10' OFFSET FROM OHWM

APPROXIMATE WETLAND AREA

APPROXIMATE WETLAND BUFFER (60')

DATA POINT (DP)

LEGEND

EXISTING LAND COVER TYPES

IMPERVIOUS SURFACE

BARE GROUND / PERVIOUS SURFACE

NON-NATIVE VEGETATION 0-25' FROM OHWM

NON-NATIVE VEGETATION 25-50' FROM OHWM

MIXED NATIVE / NON-NATIVE VEGETATION LANDWARD OF OHWM

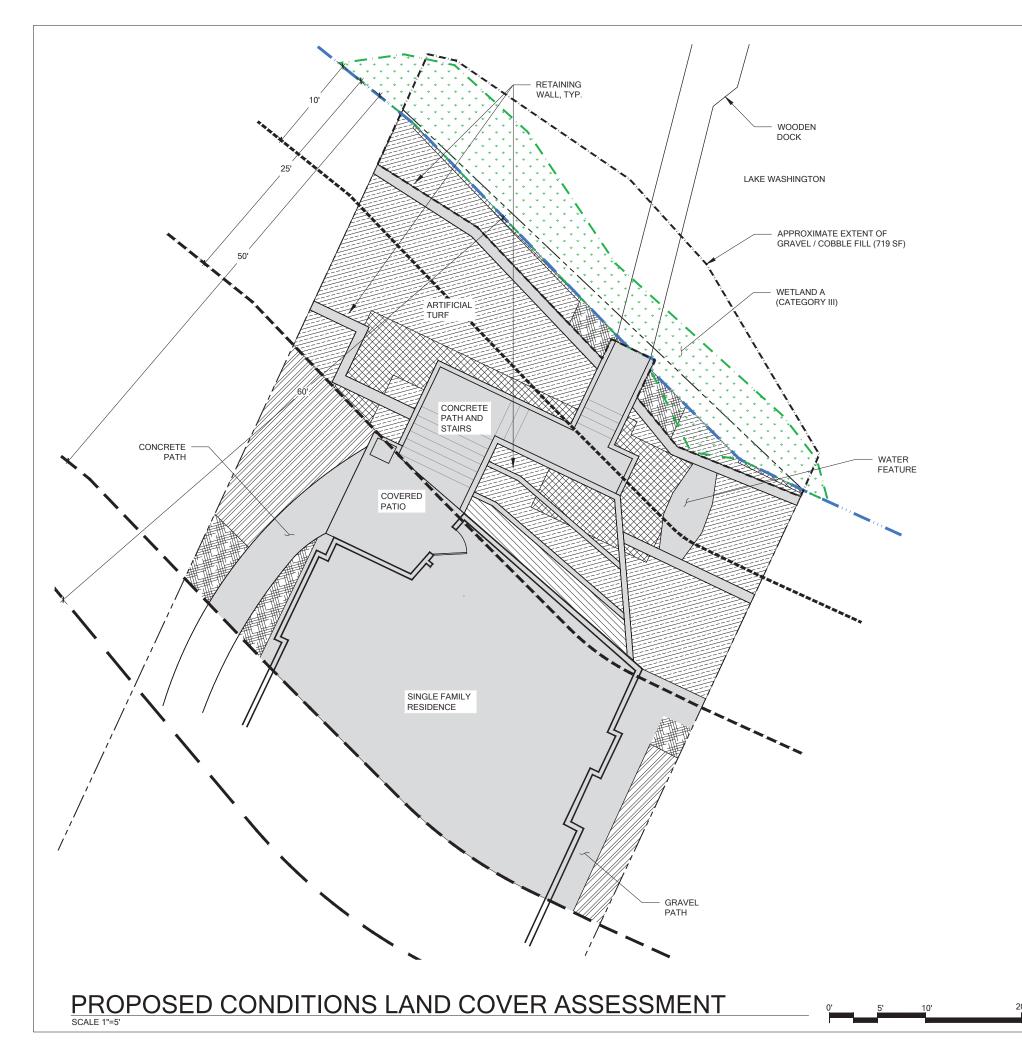


SCALE ACCORDINGLY.

DESIGNED: DRAFTED: CHECKED:

JOB NUMBER: 200908 SHEET NUMBER:





IMPACT CALCULATIONS

SHORELINE DEBIT CALCULATIONS

EXISTING LAND COVER OF AREAS TO BE IMPACTED	AREA (SF)	EXISTING VALUE	FINAL VALUE	CHANGE IN LAND COVER VALUE	TOTAL DEBIT
NON-NATIVE (0-25') TO IMPERVIOUS	152	0.3	0.0	0.3	45.6
NON-NATIVE (0-25') TO BARE GROUND/PERVIOUS	30	0.3	0.15	0.15	4.5
NON-NATIVE (25-50') TO BARE GROUND/PERVIOUS	37	0.25	0.15	0.10	3.7
				TOTAL:	53.8

SHORELINE CREDIT CALCULATIONS

NON-NATIVE, 0-25' 0 0.0 0.3 0.3 0
NON-NATIVE 25-50'
(FROM IMPERVIOUS) 41 0.0 0.25 0.25 10.2
NATIVE, 0-10' (FROM IMPERVIOUS) 51 0.0 1.0 1.0 51
BARE GROUND/PERVIOUS 2 0.0 0.15 0.15 0.3
NATIVE, 0-10' (FROM NON-NATIVE) 352 0.3 1.0 0.7 246.
NATIVE, 0-25' (FROM NON-NATIVE) 789 0.3 0.8 0.5 394.
TOTAL: 702.4



APPROXIMATE OHWM (NON-DELINEATED)

SHORELINE SETBACK (50' FROM OHWM)

10' OFFSET FROM OHWM APPROXIMATE WETLAND AREA

APPROXIMATE WETLAND BUFFER (60')

EXISTING LAND COVER TYPES TO REMAIN

IMPERVIOUS SURFACE

BARE GROUND / PERVIOUS SURFACE

NON-NATIVE VEGETATION 0-25' FROM OHWM

NON-NATIVE VEGETATION 25-50' FROM OHWM

PROPOSED LAND COVER TYPES

IMPERVIOUS TO NATIVE VEGETATION, 0-25' (186 SF)

NON-NATIVE VEGETATION TO NATIVE VEGETATION, 0-25' (735 SF)

S ERMIT

JOB NUMBER: 200908 SHEET NUMBER:

SHEET SIZE: ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY.

WATERSHED

750 Sixth Street South Kirkland WA 98033

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HORMEL RESIDENCE
CONCEPTUAL MITIGATION PLAN
PREPARED FOR SCOTT HORMEL
PARCEL #7768700230
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DESIGNED: DRAFTED:

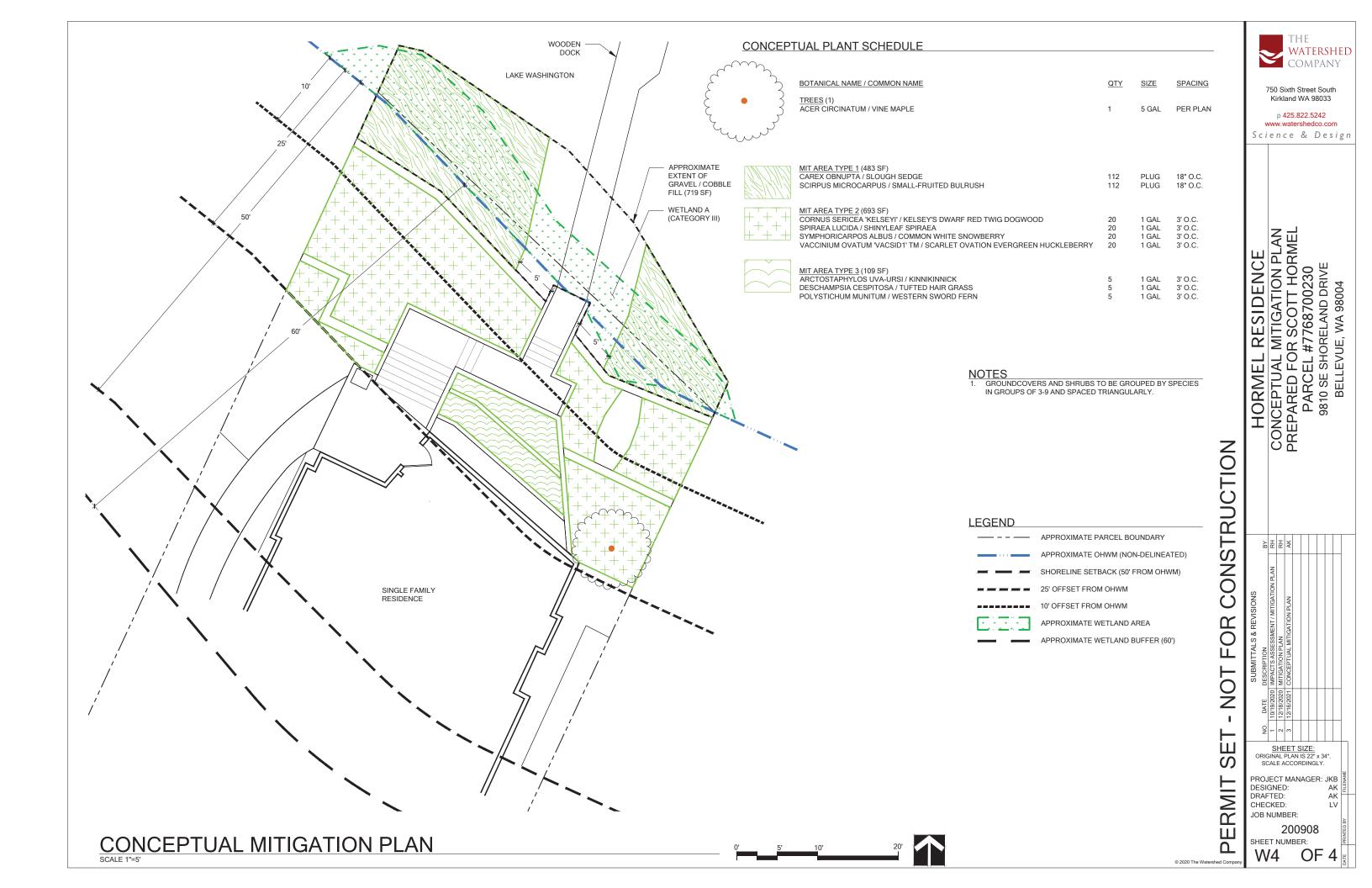
CHECKED:





CONS

FOR



Technical Memorandum



Date: December 18, 2020

To: Scott Hormel

From: Roen Hohlfeld, Kenny Booth

Project Number: 200908

Project Name: Hormel Residence

Subject: Wetland Delineation, Impact Assessment, and Restoration Plan

Intent

This memorandum has been prepared to present the findings of a wetland and ordinary high water mark (OHWM) delineation study located at 9810 SE Shoreland Drive in Bellevue, WA (parcel number 7768700230). The study was conducted in response to a request by the City of Bellevue as a preliminary step to rectify a reported violation occurring within the shoreline jurisdiction of Lake Washington. In addition to delineating on-site wetlands, impacts associated with this violation were assessed. A strategy for restoration of impacts is outlined in this memo and depicted in the enclosed Mitigation Plan.

Methods

Field investigations for the delineation study were conducted on December 3, 2020 by The Watershed Company ecologists Roen Hohlfeld and Jamie Sloan.

The study area was evaluated for wetlands using methodology from the Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region Version 2.0 (U.S. Army Corps of Engineers 2010). Presence or absence of wetlands was determined on the basis of an examination of vegetation, soils and hydrology. These parameters were sampled at several locations along the wetland boundary to determine the wetland edge. Wetland A was classified using the Department of Ecology's 2014 rating system (Hruby 2014).

Characterization of climatic conditions for precipitation in the Wetland Determination Data Forms were determined using the WETS table methodology (USDA, NRCS 2015). The "Seattle Tacoma Intl AP" station from 1981-2010 was used as a source for precipitation data (http://agacis.rcc-acis.org/). The WETS table methodology uses climate data from the three

The Watershed Company Technical Memorandum December 18, 2020 Page 2

months prior to the site visit month to determine if normal conditions are present in the study area region.

The ordinary high water mark (OHWM) of Lake Washington was evaluated based on the presence or absence of an OHWM as defined by Section 404 of the Clean Water Act, the Washington Administrative Code (WAC) 220-660-030, and the Revised Code of Washington (RCW) 90.58.030 and guidance documents including Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State (Anderson 2016).

Public-domain information on the subject property was reviewed for this delineation study. Resources and review findings are presented in Table 1 of the "Findings" section of this letter.

Findings

The study area is located in Water Resource Inventory Area (WRIA) 8, the Cedar-Sammamish Watershed, within the East Lake Washington – Bellevue North drainage basin. It is within the City of Bellevue, with the northern extents of the subject parcel defined by Lake Washington.

Public-domain information is summarized in Table 1 below.

Table 1. Summary of online mapping and inventory resources.

Resource	Summary
USDA NRCS: Web Soil Survey	Kitsap silt loam, 15-30% slopes. Seattle muck mapped approximately 70 feet southeast of subject parcel.
USFWS: NWI Wetland Mapper	Lacustrine System (Lake Washington) mapped at northern parcel boundary. No stream or wetlands mapped within 300 feet of subject parcel.
WDFW: PHS on the Web	Sockeye, bull trout, kokanee, steelhead, coho, chinook, and cutthroat mapped in Lake Washington near subject parcel.
WDFW: SalmonScape	Documented chinook, coho, steelhead, sockeye, and kokanee presence; documented bull trout rearing.

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WA-DNR: Forest Practices Activity Mapping Tool	One Type S water body (Lake Washington) mapped along northern extent of subject parcel.
King County iMap	No stream or wetlands mapped within 300 feet of subject parcel.
WETS Climatic Condition	Normal

One Shoreline of the State (Lake Washington) and one associated wetland (Wetland A) were delineated and flagged within the study area. Wetland A is a lake fringe wetland, with a small slope component. The wetland rates as a Category III wetland with low habitat functions. The City of Bellevue requires associated wetlands with these scores to have a 60-foot buffer.

Impact Assessment

A comparison of aerial photos from 2015, 2017, and 2019 shows that some vegetation within the wetland and shoreline area was displaced by the placement of cobble and gravel. The addition of cobble and gravel has altered the native substrate of this area, which appears to be a silty loam or mucky loam in adjacent undisturbed areas. The primary result of this alteration is the overall cover of vegetation within the wetland area has been reduced. Wetland vegetation plays a key role in improving water quality as well as providing wildlife habitat. Plants have the ability to trap and hold sediments and remove excess nutrients and toxins from the water. Additionally, vegetation, particularly woody plants, have the ability to dissipate wave energy from storms and powerboats which could otherwise erode shorelines or damage property. Therefore, these primary wetland functions were reduced as a result of the gravel/cobble placement.

It appears that some vegetation has reestablished since 2019 based upon field observations. Unfortunately, the majority of the vegetation that has reestablished is not native to the region. Some species are listed on the King County Noxious Weed List/Weeds of Concern list including purple loosestrife (control is required in King County), reed canarygrass, yellow flag iris, and bird's-foot trefoil. This composition of species are aggressive colonizers that will outcompete most native plants and they do not support native terrestrial or aquatic fauna to the degree that native plants otherwise would.

With regard to the lake's ordinary high water mark (OHWM), the cobble placement appears to have raised the elevation of the native grade by approximately 5-6 inches along the OHWM boundary. However, the wooden bulkhead present in pre-existing conditions was located

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further waterward than where the existing concrete retaining wall currently stands, so the location of the OHWM has likely not shifted.

Restoration Strategy

In an effort to rectify the unpermitted work and return the site to compliance under City of Bellevue critical areas and shoreline regulations, a restoration plan has been developed (see attached). This plan will remove imported cobble and gravel from the shoreline and wetland areas to expose native substrate. Additionally, non-native vegetation including (but not limited to) purple loosestrife, reed canarygrass, yellow flag iris, and bird's-foot trefoil will be removed and replaced with native vegetation appropriate to the site. Areas that are non-vegetated as a result of the gravel/cobble placement (with the exception of those arras immediately adjacent to the dock) will also be re-vegetated with native plants. Recommended native plant species include slough sedge and small-fruited bullrush.

Conclusion

On-site critical areas including one lake fridge wetland and one shoreline of the state (Lake Washington) have been impacted with the placement of gravel and cobble fill, resulting in a decrease of vegetation and associated loss of water quality and habitat functions. The restoration plan provided will restore these functions and ensure no net loss has resulted to these critical areas.